The Paper-Smart Office:
Tips To Work By

The economic cost of using office paper – copier, printer, and fax paper – is tremendous. It's not until you also consider the environmental impacts of that use, however, that you begin to understand paper's *true cost*. Virgin paper production (and even recycled paper to a lesser degree) requires resources like energy, water, and new fiber (primarily from trees) and produces harmful emissions in the process. Even with effective recycling programs, a fair amount of paper still ends up in the garbage and is then sent to a landfill.

> The average office worker uses 5 sheets of paper per hour (10,000 sheets per year) at a purchase price of roughly $50. When you include related costs like printing, copying, storing, and mailing, it's estimated that organizations spend over *ten times* as much *using* paper as they do buying it.
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> **- Bruce Nordman**
> **Principal Research Associate**
> **Lawrence Berkeley Laboratory**

Recognizing that paper is one of our most widely used means of communication, what options do we have? The first step to becoming "paper-smart" is to *rethink* how and when paper is used. When creating or sharing a document (and especially before sending it to the printer or making multiple copies) quickly ask yourself the following questions:

1. In this situation, is there a way to *prevent* or avoid using paper entirely?
2. If paper is absolutely necessary, how can I *reduce* the amount I use?
3. After the paper has been used for its original purpose, can I or others *reuse* it in some way?

Paper-Smart Pyramid

Prevent - Avoid paper entirely

Reduce - Use the least amount possible

Reuse - Get multiple uses out of each sheet

Recycle - Only after each sheet has been fully used

100% Paper-Free: Electronic Mail, Faxing, and Filing

❑ Use e-mail to send memos and share computer documents.

❑ Send and receive faxes directly from your computer.

❑ Electronically file e-mail messages instead of filing hard copies.

❑ Convert documents that are frequently mailed out to an electronic format like PDF (Portable Document Format) so they can be sent via e-mail. Also, make them available on your Web site.

❑ Store old computer documents on disk, CD-ROM, or microfiche.

❑ Create a central computer filing system to more easily share files with co-workers and to avoid maintaining duplicate personal files.

❑ Subscribe to on-line publications in place of printed versions. Store them electronically.

It's In Your Control: Document and Equipment Settings

❑ Adjust margins and fonts to reduce the number of pages in your document.

❑ Proofread documents on the computer before sending them to the printer. Take advantage of computer functions that can check both spelling and grammar.

❑ Utilize computerized templates to print letterhead and forms in-house. Coupled with a high-quality printer, you can print what you need, as you need it.

❑ When it comes to copying and printing, start by asking yourself whether you really need all of those copies.

❑ If time allows, hold off on making extra copies now and make more later if you need them.

❑ Before running a large number of copies, do a one-page test of copier setting.

❑ Establish an annual review process for all forms and informational materials.

❑ Revise forms to reduce length and eliminate unnecessary duplicates pages.

❑ Purchase office paper with a lower basis weight. For example, buy 18 pound copier paper instead of 20 pound.

❑ Redesign printed pieces to use less paper. Avoid increasing trim waste created at the printer.

Two Sides Are Better Than One: Duplexing and Draft Paper

❑ Write, copy, and print on both sides of the paper (duplex) whenever possible. In addition to double-sided features on photocopy machines, duplexing units are available for most printer and multi-function device (MFD – combination printer, fax, and copy machine) models.

❑ Consider setting copiers, as well as printers and MFDs with duplex units, to "duplex by default." Clearly mark machines set with this option.

❑ To make duplexing easier, send large copy jobs to in-house or external copy centers.

❑ When copying a book, one can copy two book pages onto one side of a 'standard' (8.5 x 11 inch) sheet, particularly if the 'percent reduction' feature of the copier is used to reduce the size of each page. Use of both strategies together (duplexing and putting two original pages on each copied page) can avoid up to three of every four sheets

❑ Reuse the blank side of used office paper for drafts and scratch paper. Draft paper in very good condition can be re-inserted into copiers, printers, and fax machines. Scratch paper can be used as is or made into note pads.

❑ Place a tray by printers and fax machines to collect paper that can be reused.

❑ Use outdated letterhead for draft and scratch paper.

What Comes Around, Goes Around: Routing Documents

❑ Instead of printing them out, circulate memos, reports, manuals, and other documents via e-mail, or make them available on-line through an intranet site or a Web site. Suggest to the recipient that he or she store them electronically.

❑ If a hard copy already exists, and a scanner is available, consider turning the paper copy into an electronic file and distributing it in the ways mentioned above.
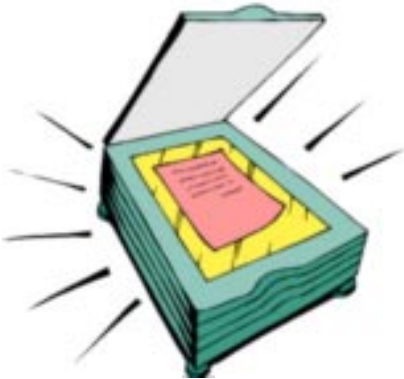
❑ If using a scanner isn't possible, circulate only one copy of the document using a routing slip or post it on centrally located bulletin boards. Should the paper document be time-sensitive, be sure to note that on the routing slip.

❑ Share publications, or photocopy excerpts for distribution, rather than ordering several copies of the same publication.

❑ Create a central filing system for paper documents instead of maintaining duplicate personal files.

Stamp of Approval: Direct Mail and Other Mailings

❑ Reduce unwanted direct mail by contacting the senders of materials your business receives but doesn't use. It is helpful to provide them with the exact wording on the mailing label.

❑ As for outgoing direct mail, periodically update all mailing lists. One way to help keep your lists up-to-date is to provide recipients with a simple way to have their name removed. An e-mail address, toll-free number, and postage-paid response card all work well. The same steps should be taken with report distribution lists.

❑ Design documents to be self-mailers.

❑ Send two-way envelopes for mailings requiring a response.

> At one large Seattle-area office, a six-week study showed that the mailroom staff was spending 25 percent of its time sorting advertising mail.
>
> **- National Waste Prevention Coalition**
>
> For more information on ways businesses can reduce unwanted direct mail, visit the group's Web site at www.metrokc.gov/nwpc.

❑ Choose mailing labels with adhesives that allow you to remove the label from the envelope without damaging it. This allows for reuse. With a short message printed on the label like "Remove label to reuse envelope," the sender can also promote the idea of reuse to the person receiving the mailing.

The "Other" Category: More Paper-Smart Office Tips

❑ Modify or eliminate the fax cover sheet. Instead of using a full page, use a half page. Better yet, don't use a cover sheet at all. Attach small Post-It™ fax transmission stickers to the first page of your fax, or purchase a rubber stamp that imprints a place to write the transmittal information directly on the top sheet.

> Paper takes a considerable amount of energy to produce. A sheet of paper made from wood consumes the equivalent of about 17 Watt-hours (Wh) of electricity (about 12 Wh for 100% recycled paper). This means that the manufacturing energy for the 5 sheets an hour typically used by office workers is about the same as that needed to run an 80 W bulb.
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❑ Set up a personal or office-shared "Reuse Station" where office materials like file folders and incoming mailing envelopes are stored for reuse. With mailing envelopes, simply cross out or use adhesive labels to cover old addresses. If necessary, rubber stamps can be bought that say, "This envelope is being reused as part of our environmental commitment."

Help From Above:
Management's Role

❑ Invest in technology that will help staff use paper more efficiently. Some ideas include e-mail, computer-based faxing, and duplexing units for printers and multi-function devices.

> Papermaking has high forest and land-use impacts. Pulp mills in the United States consume more than 12,000 square miles of forest each year, almost half of all trees cut now end up as paper, and the percentage is increasing. In addition, pulping and bleaching processes emit up to 1,000 chlorinated organic compounds ("organochlorides") including dioxin, one of the most toxic and persisitent substances on Earth.
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❑ Provide training on effective ways to reduce paper use, especially on how to use existing and new technology. One example is training on ways to store/file e-mails.

❑ Encourage staff discussions on ways to reduce paper. Give departments the authority to examine their paper use and make changes.

❑ Consider a company-wide policy on double-sided copying and printing ("duplex by default").

❑ Set a personal example.

Getting the Word Out:
Internal and External Promotion

❑ Promote paper-smart practices within your company. Encourage participation with contests and financial incentives. Post signs, such as a list of paper-saving copy ideas, at every copier. Always publicize cost savings whenever that information is available. For additional promotional ideas, contact the BIRV and request the fact sheet "Promoting Your Program."

❑ Let your customers, suppliers, and the public at large know what you are doing to reduce your use of paper. Tag lines on letterhead, envelopes, and publications; a summary in an annual report; and announcements at meetings and in press releases are just some of the ways you can promote your organization's paper waste prevention efforts.

❑ Get recognized for your efforts. Some government agencies and environmental groups offer awards to organizations that significantly reduce waste. One example of this is the County-wide Green Works Program. Contact the BIRV for a Green Works application.

Your Paper-Smart Ideas

The challenge of compiling a list of practices like this is that, invariably, something always gets missed. This is due, in part, to simply not being aware of all the ways that people are currently using less paper. It's also because new ideas, practices, and technologies are being developed all the time.

Do you know a paper-smart practice that we've missed? If so, let us know. Contact us at one of the addresses or the phone number below. Be sure to include your name, company name, phone number, and e-mail address. Your company may get recognized as a result.

Contact Information
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Credit: Some of the information in this booklet is from the "Paper Reduction Program Handbook," prepared by the Alameda County (CA) Waste Management Authority, and the ReThink Paper Web site at www.rethinkpaper.org.

The Business and Industry Recycling Venture is a special program of the Greater Seattle Chamber of Commerce in partnership with Seattle Public Utilities.

This booklet is printed on recycled paper and is available electronically in portable document format (PDF). January, 2000